



Human & Cultural Intelligence Challenges & Best Practice





The objective of Human Terrain Mapping is to provide military commanders and staff with an understanding of the local population. The goal is to give commanders insight into the population and how they may react in order to enhance operational effectiveness, save lives, and reduce military and civilian conflict.

The **Social Terrain** refers to the methodology of using publicly available social media content found in various media especially on the WWW and creating analytic-derived products

These data are typically crowdsourced or publicly available content which ultimately lowers the possibility of synthesized or manufactured information.

It is believed that the "crowd" has the ability to characterize the local population of a region based on the data that they post about it on the Web.



The Challenges



Three Important points are required to be considered while looking into the Geoint Dimension of Social Cultural Dynamics:

- Mapping Human terrain
- Mapping Social cultural data
- Software tools to manage and analyze these data



The Challenges



Mapping Human Terrain

For a country like India with over

- √ 3.2 million sq km of land,
- √ 1.2 billion population
- √ 750 thousand locations;
- √ 2000 ethnic groups;
- √ 1600 languages and dialects
- √ 1200 schedule caste
- √ 1000 tribes

the challenges are even higher



The Challenges



Mapping Social Cultural Data

As we are all aware that social cultural data is not only huge but is also highly unstructured. And a tremendous effort is required for collecting the same.

And even when most of the data that describes the social cultural is available on the web it requires trained, agile and flexible harvesting tools



Best Practices



 Use NGO's; social workers; self help groups; communities when interacting with local population. We have met with good success in data collection in various programs we implemented for Ausaid & Usaid in the sub-continent.





2. Map boundaries that are local. Most of the tribes have their own distinct boundaries which do not exist in paper or as legal document but all of them religiously adhere to it.



Best Practices







3. Use of academic institutes to assist in local programs and development of appropriate forms and questionnaire. Use of appropriate NGO's

All these are the best "boots" on the ground



4. Use of census data

5. Use of voter data from the election department





6. Understanding culture can assist in effective actions or reaction to a particular event. Culture is the shared beliefs, values, customs, behaviors, and artifacts members of a society use to cope with the world and each other.

It is important that Soldiers and Homeland Security personnel are trained and educated in cultural factors in the area where they are assigned.





7. Trained, Agile, Flexible Harvesting tool:

Internet media and social networks is an essential component of open-source intelligence.

The challenge on the social media is not so much of data but of how to derive meaningful information from it.

So harvesting tools are important, that can allow us to query and file, with some amount of accuracy, the behavioural mode of people.





8. Geoint Analytic Software Prerequisites

- Reporting/Dashboard visualization
- Should provide adhoc reports
- Should do predictive modelling and,
- Intelligent Search for both structured and unstructured data





It is important that military decision makers make this investment in technology today for it will drastically cut cost of fighting the war or even pre-empting major mishaps from happening.





Thank You Sanjay K Agarwalla

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